

## REMARKS

In the September 29, 2011 Office Action, claims 2-4, 6 and 23 stand rejected in view of prior art. Claims 2-4, 6-20 and 23 were rejected as being indefinite for failing particularly point out and distinctly claim the subject matter that Applicant regards as the invention. No other objections or rejections were made in the Office Action.

### *Status of Claims and Amendments*

In response to the May 5, 2011 Office Action, Applicants have amended claims 6-20, as indicated above. Thus, claims 2-4, 6-20 and 23 are pending, with claims 6-20 being independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

### *Claim Rejections - 35 U.S.C. §112*

On page 2 of the Office Action, claims 2-4, 6-20 and 23 were rejected under 35 U.S.C. §112, second paragraph. However, in paragraphs (a), (b) and (c) on page 2 of the Office Action, suggested amendments to the claims were set forth that would place the claims in better condition for allowance. In response, Applicants have amended claims 6-20 as set forth in the Office Action.

Specifically, claims 6-20 have each been amended to recite culturing of a second sample *in the absence of the test specimen*. Further, each of claims 6-20 has been amended to recite that *the disrupted gene* is classified into . . .

Applicants believe that the claims now comply with 35 U.S.C. §112. Withdrawal of the rejections is respectfully requested.

***Rejections - 35 U.S.C. § 102 – Claims 2-4, 6 & 23***

On page 3 of the Office Action, claims 2-4, 6 and 23 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Published Application No. 2003/0180953 (hereinafter the “Roemer et al publication”). In response, Applicants have amended independent claim 6.

Specifically, claim 6 includes a Markush group. Applicant has canceled portions of the Markush group that appear to be disclosed in the Roemer et al. publication. The remaining sections of the Markush group recited in independent claim 6 are not disclosed or suggested by the Roemer et al. publication.

Further, the Roemer et al. publication discloses a method for correlating changes in the levels of gene by inactivating one of two wild type alleles of the gene and by under-expressing, not expressing or overexpressing the other allele of the gene to identify changes in the levels of gene transcripts.

A gene for a promoter assay as disclosed in the Roemer et al. publication is different from a gene to be disrupted as set forth in independent claim 6. The gene-disrupted strain of claim 6 is used to make sensitivity in expression of a gene which is an indication for a promoter assay higher than that for a wild type.

The Roemer et al. publication provides methods and compositions that enable the experimental determination as to whether any gene in the genome of a diploid pathogenic organism is essential, and whether it is required for virulence or pathogenicity. The methods involve the construction of genetic mutants in which one allele of a specific gene is inactivated while the other allele of the gene is placed under conditional expression. *See, for example, the **Abstract** of the Roemer et al. publication.* To this end, the Roemer et al. publication has adopted a method comprising substituting one of alleles of a diploid fungal

strain with a selectable marker and modifying the other allele so that expression of the second allele is regulated by a heterogonous promoter. *See, for example, Paragraph [0015] of the Roemer et al. publication.*

However, the gene-disrupted strain according to independent claim 1 is introduced only by substituting a gene with a selectable marker and, therefore, a strain produced by gene-disruption has an altered chromosome configuration. That is, the recitation of independent claim 6 merely involves disruption of a gene and does not require any modification of gene.

In addition, the object of the present invention is to enhance sensitivity to a chemical. For example, a vacuole has a structure surrounded by a membrane in a cell and plays a role in storage or decompose unnecessary substances for the cell. When a gene regulating this action is disrupted, unnecessary substances are retain within a cytoplasm. Thereby, when a cell is contacted with a harmful chemical, a less amount of chemical induces changes in life or death of a cell, proliferation ability, aspiration amount, enzyme activity and/or gene expression.

Thus, the recitation in claim 6 is not anticipated by Roemer et al.

Applicants respectfully request withdrawal of the rejections.

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Appl. No. 10/581,085  
Amendment dated December 27, 2011  
Reply to Office Action of September 29, 2011

In view of the foregoing amendment and comments, Applicants respectfully assert that claims 2-4, 6-20 and 23 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Respectfully submitted,

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